

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

015114-068400US

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on January 7, 2008

Signature [Signature]

Typed or printed name Dana Kane

Application Number

10/698,739

Filed

10/30/2003

First Named Inventor

Binh Vo et al.

Art Unit

2117

Examiner

Nguyen, Steve N.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

/David B. Raczkowski/

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

Signature

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Registration number if acting under 37 CFR 1.34. _____

January 7, 2008
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of one (1) form is submitted.

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on September 7, 2008
TOWNSEND and TOWNSEND and CREW LLP

By: [Signature]

**STATEMENT OF REASONS IN
SUPPORT OF PRE-APPEAL BRIEF
REQUEST FOR REVIEW**

PATENT

Attorney Docket No.: 015114-068400US

Client Ref. No.: A01109

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Binh Vo et al.

Application No.: 10/698,739

Filed: October 30, 2003

For: FUNCTIONAL FAILURE
ANALYSIS TECHNIQUES FOR
PROGRAMMABLE INTEGRATED
CIRCUITS

Customer No.: 26059

Confirmation No. 3284

Examiner: Steve N. Nguyen

Technology Center/Art Unit: 2138

**STATEMENT OF REASONS IN
SUPPORT OF PRE-APPEAL BRIEF
REQUEST FOR REVIEW**

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action mailed September 6, 2007 and the
Advisory Action mailed November 26, 2007 on the above-referenced application, please enter the
following amendments and remarks:

This statement is submitted in support of the Pre-Appeal Brief Request for
Review, which is submitted herewith, along with a Notice of Appeal. The applicant respectfully
requests review of the Final Office Action and the Advisory Action, regarding the rejection of
the claims under 35 U.S.C. § 112, ¶ 1, and under 35 U.S.C. § 102(e) using U.S. Patent 6,966,020
to Abramovici et al ("Abramovici").

I. Rejection under 35 U.S.C. § 112, ¶ 1

Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement regarding the limitation "*wherein at least one new test path includes every routing resource of the subset under test; and at least one other resource.*" In particular, the actions assert that a new test path cannot include all of the resources of the subset.

A. The original claims state that new test paths test the subset

The original claim 1 recites "*generating new test patterns including new test paths for the subset of the routing resources that occurred most frequently in the failed test paths.*"

As this limitation is part of the original specification, it may be used to support any later amendments. The new test paths are "for the subset," and not strictly for only part of the subset at a time. "By grouping together the most frequently occurring resources in the failed test paths, SFI tool 115 is better able to isolate the particular routing resources that are causing the test pattern failures." *See Specification*, page 5 lines 4-6.

Additionally, original claim 3 recites "*generating new test patterns for new test paths that route through every combination of fan-in resources and fan-out resources that are programmably connectable to each of the subset of the routing resources.*"

The new test paths utilize multiple fan-in and fan-out resources. With every combination being used, each test path has a different fan-in resource and/or fan-out resource to the subset than another test path. As the fan-in and fan-out resources are connectable to each resource of the subset, the above limitation explicitly discloses that each and every resource of the subset is tested during a new test path. *Id.*, page 5 lines 27-28. Testing every combination of fan-in and fan-out resources to the subset allows a confirmation of a failure. *Id.*, page 5 lines 6-7.

Additionally pages 8 and 9 of the amendment after final mailed November 6, 2007 provides additional support.

B. FIG. 2B provides an example of how combinations of fan-in and fan-out resources may be used

The Office Action asserts that because the singular term "resource" is used in paragraph 34 that there is only one resource of the subset in a test path. The term "resource" is often used collectively even where there are multiple parts that may cause faults. Each one of these parts may also be viewed as a resource. FIG. 2B simply provides a novel way to test whether a resource (single or group) has a fault. A grouping of resources can provide greater efficiency as described on page 5 lines 4-6 of the present specification.

Accordingly, Applicants respectfully request withdrawal of these rejections.

II. Rejection under 35 U.S.C. 102(e) and 103(a), Abramovici

Claims 1, 2, 5, 9, 12, 15, 17, 21, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Abramovici et al (US Pat. 6,966,020; hereinafter referred to as Abramovici). Claims 3, 4, 6-8, 11, 13, 14, 16, 18-20, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abramovici.

At page 2, the Final Office Action seems to admit that Abramovici does not teach or suggest at least one new test path including "*every routing resource of the subset under test*," as recited by claim 1. There is no argument or assertion made that Abramovici actually teaches this limitation. It is only asserted that the present specification does not teach this limitation. As described above, the present specification does teach this limitation. Accordingly, it is assumed that it is the office's position that Abramovici does not teach or suggest this limitation. Correction is therefore requested.

Note that the 102(e) rejections in the Final Office Action refer back to the Non-Final Office Action of 3/2/2007, which rejected old language of the claim, and thus these rejections are no longer applicable. For a more complete argument of why Abramovici does not teach or suggest every limitation of claim 1, please refer to pages 8 and 9 of the amendment filed Jul 2, 2007.

Furthermore, at page 2, the Final Office Action asserts that the plurality of failed test patterns correspond to testing multiple faulty resources, which occur in subdivisions of wires under test 37, 38. *See Abramovici*, col. 7 line 66 to col. 8 line 2. The subdivisions are a result of

separating the faulty resources. *Id.*, col. 8 line 1. Thus, a new test path only includes the resources of one subdivision. Accordingly, Abramovici does not teach or suggest "*wherein at least one new test path includes every routing resource of the subset under test,*" that occur most frequently in the failed test paths, as recited in claim 1.

For at least these reasons, claim 1 is allowable over Abramovici. As claim 1 is allowable, claims 2-8 and 21-24 which depend therefrom are also allowable for at least the same rationale.

Applicants submit that independent claims 9 and 15 should be allowable for reasons mentioned with respect to claim 1. As claim 9 is allowable, dependent claims 10-14 are allowable for at least the same rationale. As claim 15 is allowable, dependent claims 16-20 are allowable for at least the same rationale.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

/David B. Raczkowski/

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